

REMARKS

By this amendment, Applicant amends claims 7, 27, 28, 31, 45, 49, 51-53, 56-58, and 60-62 to clarify the claims. No new matter has been added. Claims 7-10 and 27-70 remain pending in this case, of which claims 7, 27, 31, 45, 49, 58, and 63 are independent claims.

In the last Office Action, the Examiner rejected claims 7-10 and 27-70 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,070,151 to Frankel ("Frankel") in view of U.S. Pat. No. 6,321,212 to Lange ("Lange") in view of an article entitled "Pricing Mortgage-Backed Securities in a Multifactor Interest Rate Environment: A Multivariate Density Estimation Approach" by Boudoukh et al. ("Boudoukh") in view of an article entitled "The Relevance of Interest Rate Processing in Pricing Mortgage-Backed Securities" by Chen et al. ("Chen") in view of an article entitled "A Closer Look at Mortgage-Backed Securities" by Cahill ("Cahill") and further in view of an article entitled "An Investor's Guide to Mortgage Securities" ("IGMS") by The Bond Market Association.

The Examiner contends that Frankel teaches a method for creation of structured interest rate securities and that Boudoukh teaches analyzing and pricing of mortgage-backed securities. The Examiner also contends that Chen teaches term structure fitting and cash flows due to prepayments and that Lange teaches hedging strategies and floating-rate characteristics including market risk, credit risks, and event risks in derivatives trading and pricing. Cahill allegedly teaches hedging strategies and floating rate characteristics. IGMS purportedly teaches delineating the risks associated with classes of mortgage securities.

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The Examiner contends that it would have been obvious for one skilled in the art to combine these six references to teach the claimed invention. The Examiner alleges that the motivation to combine Frankel and Lange is in Lange's disclosure, which purportedly teaches a method for statistical diversification of credit risk through the mutualization of multiple derivative counterparties and for creating a market for derivatives trading. The Examiner also alleges that the motivation to combine Frankel and Lange with Boudoukh is Boudoukh's disclosure of a method for statistical diversification in the analysis of mortgage-backed securities. The Examiner further alleges that the motivation to combine Frankel, Lange, and Boudoukh with Chen may be found in Chen's disclosure of a method for statistical diversification in the analysis of mortgage-backed securities and their sensitivities to interest rate fluctuations. The Examiner additionally alleges that the motivation to combine Frankel, Lange, Boudoukh, and Chen with Cahill may be found in Cahill's disclosure of a method for statistical diversification optimization in light of market instabilities. Finally, the Examiner finds motivation to combine Frankel, Lange, Boudoukh, Chen, and Cahill with IGMS in IGMS's disclosure of a method for statistical diversification and combination of securities in the mortgage-backed market that is optimum through comparison and evaluation of class characteristics and risks.

Applicant respectfully disagrees with the Examiner's assertions. In order to make a *prima facie* case of unpatentability under § 103, the Examiner must show each and every element of Applicant's claimed invention, a reasonable expectation of success, and a motivation to combine the references. The Examiner has failed to make the *prima facie* case because he has neither shown each and every element of claims 7-10

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and 27-70 in the references, nor shown a reasonable expectation of success, nor shown a motivation to combine the references.

To illustrate, consider amended claim 49, which recites, *inter alia*, a method for creating investment securities. A securities structure backed by mortgage pool components is created in accordance with regulatory structuring constraints, wherein the securities structure has one or more classes of securities, and wherein at least one class is subject to an artificial leverage limitation under the regulatory structuring constraints because it is designated for absorbing prepayment risk. One of the at least one class designated for absorbing prepayment risk is restructured to overcome the artificial leverage limitation by combining it with at least one cash flow coming from interest-rate derivative components. The structured securities are issued.

Frankel does not disclose, suggest, or teach restructuring a class designated for absorbing prepayment risk to overcome the artificial leverage limitation by combining it with at least one cash flow coming from interest-rate derivative components. In contrast, Frankel teaches the issuance of securities having principal-only and interest-only cash flows backed solely by mortgages. See, e.g., Frankel col. 3, line 29 to col. 4, line 48. This is not the same or even suggestive of combining mortgage pool components with interest-rate derivative components to overcome the artificial leverage limitation.

Furthermore, Lange does not disclose, suggest, or teach restructuring a class designated for absorbing prepayment risk to overcome the artificial leverage limitation by combining it with at least one cash flow coming from interest-rate derivative components. In contrast, Lange discloses a purportedly new type of financial derivative

instrument that is implemented with demand-based adjustable return (DBAR) contingent claims. See, e.g., Lange col. 7, lines 19-30; col. 8, lines 18-28. Essentially, Lange creates demand-based trading instruments by establishing termination criteria, accepting investments, and allocating a payout to each investment. See Lange col. 10, lines 43-57. Lange emphasizes eschewing traditional "house banking" exchanges or market makers in favor of the traders of DBAR contingent claims themselves, wherein the risk of bankruptcy is allocated among the traders. See Lange col. 9, line 57 to col. 10, line 33. Lange also emphasizes eschewing the traditional over-the-counter derivatives markets in which counterparties enter into non-standardized agreements to swap, for example, fixed interest payments for floating interest payments. See Lange col. 10, lines 9-17. This is clearly not the same or even suggestive of combining mortgage pool components with interest-rate derivative components to overcome the artificial leverage limitation.

As mentioned by the Examiner, Chen teaches the pricing of mortgage-backed securities using term structure fitting and cash flows due to prepayments. Boudoukh also teaches a method for pricing mortgage-backed securities in a multifactor interest rate environment. However, the pricing of mortgage-backed securities is not the same as restructuring a class of a mortgage-backed security to overcome an artificial leverage limitation by combining mortgage pool components with interest-rate derivative components. Additionally, the Examiner has alleged that Cahill discloses duration instabilities and negative convexities. Yet these market factors do nothing to teach or suggest the novel method for creating investment securities utilizing the restructuring recited in claim 49. Moreover, the Examiner alleges that IGMS purportedly teaches

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delineating the risks associated with classes of mortgage securities. While Applicant cannot find this teaching in the section cited by the Examiner, such a teaching, even if present, would do nothing to affect the patentability of claim 49.

Fundamentally, the Examiner has failed to make a *prima facie* case because he has not shown a motivation to combine Frankel, Lange, Boudoukh, Chen, Cahill, and IGMS. The Examiner alleges that the motivation to combine these six references may be found in the disclosure of "a method of statistical diversification" that is allegedly present in all of the references. Yet statistical diversification is far different from the novel method for creating investment securities in claim 49 where a class is restructured to overcome an artificial leverage limitation. None of these references, alone or in combination, teaches this novel restructuring. Therefore, the Examiner has also failed to make a *prima facie* case because no motivation to combine has been shown. For at least this reason, claim 49 should be in proper form for allowance.

Because claims 50-57 ultimately depend from claim 49, the Examiner's obviousness rejection should likewise not apply to claims 50-57. Thus, claims 50-57 should also be allowable. Claims 27-30, 31-44, 58-62, and 63-70 are similar in scope to claims 49-57; thus, claims 27-30, 31-44, 58-62, and 63-70 should also be in proper form for allowance.

Amended claim 7 recites, among other things, a data processing system comprising a risk analysis and planning module, a deal structure module, and an administration module. The risk analysis and planning module analyzes risk elements of interest-rate derivative and mortgage pool components, develops plans for structuring securities based on selected components, and ensures each plan overcomes an

artificial leverage limitation imposed by mortgage security regulatory structuring constraints. The deal structure module validates a securities structuring plan and initializes files for the securities to be issued under the validated plan. The administration module administers the securities issued under the plan validated and initialized by the deal structure module.

As mentioned above, none of the references cited by the Examiner discloses a system that overcomes an artificial leverage limitation imposed by mortgage security regulatory structuring constraints, as recited in claim 7. For this reason, the Examiner's rejection of claim 7 under 35 U.S.C. § 103(a) is respectfully traversed, and claim 7 is deemed to be in proper form for allowance.

Claims 8-10, which ultimately depend from claim 7, should be allowable for at least the same reasons mentioned above. Claims 45-48 are analogous in scope to claims 7-10 and should be allowable for at least the same reasons mentioned above.

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

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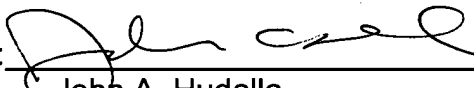
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Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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